

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (previously presented). An access node for optical networks with variable access wavelengths, comprising:

a plurality of first optical conductors each disposed to connect a respective user device;

at least one second optical conductor for connecting the access node to an optical network; and

a plurality of light sources emitting unmodulated light signals at wavelengths of the optical network and connected to said first optical conductors for feeding the unmodulated light signals to the user devices such that the unmodulated light signals of said light sources can be modulated in the user devices.

Claim 2 (original). The access node according to claim 1, wherein said at least one second optical conductor is one of a plurality of optical conductors connecting the access node to the optical network.

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Claim 3 (original). The access node according to claim 1,
wherein said light sources are lasers.

Claim 4 (original). The access node according to claim 1,
wherein said light sources are laser arrays.

Claim 5 (original). The access node according to claim 1,
which comprises optical coupling elements disposed between
said light sources and said first optical conductors.

Claim 6 (original). The access node according to claim 5,
wherein said optical coupling elements are selected from the
group consisting of first circulators and directional
couplers.

Claim 7 (original). The access node according to claim 1,
which comprises a first switching matrix connected between
said light sources and said first optical conductors.

Claim 8 (original). The access node according to claim 7,
wherein said first switching matrix capable of multicasting.

Claim 9 (original). The access node according to claim 1,
which comprises a signal processing block with optical

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wavelength division multiplexers connected between said first optical conductors and said second optical conductors.

Claim 10 (currently amended). The access node according to claim 9, which comprises a second signal block switching matrix disposed between said first optical conductors and said signal processing block.

Claim 11 (original). The access node according to claim 9, wherein said signal processing block includes at least one additional signal processing unit.

Claim 12 (original). The access node according to claim 11, wherein said at least one additional signal processing unit is selected from the group consisting of a switching matrix, an optical switch, an optical amplifier, and an optical monitoring device.

Claim 13 (currently amended). The access node according to claim 10, which comprises a further switching matrix combined with said second signal block switching matrix.

Claim 14 (previously presented). In combination with an access node according to claim 1, a user device configured for connecting to the access node, the user device comprising a

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circulator and a modulator to be connected to an information source.

Claim 15 (original). In combination with an access node according to claim 1, a user device configured for connecting to the access node, the user device comprising a modulator operating in reflection mode and configured to be connected to an information source.

Claim 16 (previously presented). A method of feeding a plurality of signals from a plurality of users into an optical network, which comprises the following steps:

generating a number of light signals of different wavelengths in an access node;

extracting a light signal in unmodulated form from the access node and transmitting the unmodulated light signal to a user device;

modulating the unmodulated light signal with a user signal in the user device to form a modulated light signal;

injecting the modulated light signal into the access node;

generating wavelength division multiplex signals in the access node; and

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feeding the wavelength division multiplex signals into the optical network.

Claim 17 (canceled).

Claim 18 (canceled).

Claim 19 (canceled).

Claim 20 (currently amended). A method of feeding a plurality of signals from a plurality of users into an optical network, which comprises the following steps:

providing an access node according to claim 1 and for optical networks with variable access wavelengths, including:

a plurality of first optical conductors each disposed to connect a respective user device;

at least one second optical conductor for connecting the access node to an optical network; and

a plurality of light sources emitting unmodulated light signals at wavelengths of the optical network and connected to the first optical conductors for feeding the unmodulated light signals to the user devices such that

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the unmodulated light signals of the light sources can be
modulated in the user devices;

connecting a number of user devices each with a circulator and
a modulator to the access node;

generating a number of light signals of different wavelength
in the access node;

extracting the light signals in unmodulated form from the
access node and transmitting the unmodulated light signals to
the user devices;

modulating the light signals with user signals in the user
devices to form modulated light signals;

injecting the modulated light signals into the access node;

generating wavelength division multiplex signals in the access
node; and

feeding the wavelength division multiplex signals into the
optical network.

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Claim 21 (currently amended). A method of feeding a plurality of signals from a plurality of users into an optical network, which comprises the following steps:

generating a number of light signals of different wavelength in ~~the an access node according to claim 1 for optical networks with variable access wavelengths, including:~~

a plurality of first optical conductors each disposed to connect a respective user device;

at least one second optical conductor for connecting the access node to an optical network; and

a plurality of light sources emitting unmodulated light signals at wavelengths of the optical network and connected to the first optical conductors for feeding the unmodulated light signals to the user devices such that the unmodulated light signals of the light sources can be modulated in the user devices;

extracting the light signals in unmodulated form from the access node and transmitting the unmodulated light signals to a number user devices;

modulating the light signals with user signals in the user devices to form modulated light signals;

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injecting the modulated light signals into the access node;
generating wavelength division multiplex signals in the access node; and
feeding the wavelength division multiplex signals into the optical network.

Claim 22 (currently amended). A method of feeding a plurality of signals from a plurality of users into an optical network, which comprises the following steps:

generating a number of light signals of different wavelength in an access node for optical networks with variable access wavelengths, including:

a plurality of first optical conductors each disposed to connect a respective user device;

at least one second optical conductor for connecting the access node to an optical network; and

a plurality of light sources emitting unmodulated light signals at wavelengths of the optical network and connected to the first optical conductors for feeding the unmodulated light signals to the user devices such that

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the unmodulated light signals of the light sources can be modulated in the user devices;

extracting the light signals in unmodulated form from the access node and transmitting the unmodulated light signals to a number user devices;

modulating the unmodulated light signals with user signals in the user devices to form modulated light signals;

injecting the modulated light signals into the access node;

generating wavelength division multiplex signals in the access node; and

feeding the wavelength division multiplex signals into a user device configured for connecting to the access node according to claim 1, the user device comprising a circulator and a modulator to be connected to an information source.

Claim 23 (currently amended). A method of feeding a plurality of signals from a plurality of users into an optical network, which comprises the following steps:

generating a number of light signals of different wavelength in an access node for optical networks with variable access wavelengths, including:

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a plurality of first optical conductors each disposed to connect a respective user device;

at least one second optical conductor for connecting the access node to an optical network; and

a plurality of light sources emitting unmodulated light signals at wavelengths of the optical network and connected to the first optical conductors for feeding the unmodulated light signals to the user devices such that the unmodulated light signals of the light sources can be modulated in the user devices;

extracting the light signals in unmodulated form from the access node and transmitting the unmodulated light signals to a number of user devices;

modulating the unmodulated light signals with user signals in the user devices to form modulated light signals;

injecting the modulated light signals into the access node;

generating wavelength division multiplex signals in the access node; and

feeding the wavelength division multiplex signals into user devices configured for connecting to the access node according

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~~to claim 1, the user devices comprising a modulator operating in reflection mode and configured to be connected to an information source.~~

Claim 24 (previously presented). In an optical network with variable access wavelengths, a combination of a user device and an access node providing communication access for the user device to the optical network, the combination comprising:

an access node with:

a plurality of first optical conductors each disposed to connect a respective user device;

at least one second optical conductor for connecting the access node to the optical network; and

a plurality of light sources configured to emit unmodulated light signals at wavelengths of the optical network;

a user device connected to said access node via a respective said first optical conductor for receiving from said access node an unmodulated light signal, said user device being configured to modulate the unmodulated light signal received from the access node.

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